

Begin  
# 442

L 20931-66 EWT(d)/EWT(l)/EWT(m)/EWP(f)/T-2/ WW

ACC NR: AP6002575

(A)

SOURCE CODE: UR/0286/65/000/023/0069/0070

AUTHORS: Zaslavskiy, Ye. G.; Portnoy, V. I.

28  
B

ORG: none

TITLE: Device for starting internal combustion engines. Class 47, No. 176748

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 69-70

TOPIC TAGS: engine starter system, internal combustion engine component

ABSTRACT: This Author Certificate presents a device for starting internal combustion engines.<sup>2)</sup> The device contains a storage battery, an electric motor used as a starter, and an actuating unit consisting of a system of relays and contacts. This system connects the fuel and oil pump motors to the storage battery and subsequently switches the electric motor into the generator mode (see Fig. 1). To increase the reliability of starting, one of the coils of a double-coil relay is connected in the actuating unit circuit. This coil locks with the activation of the second coil of the relay as a result of the activation of the

Card 1/2

UDC: 621.436-573

L 20931-66

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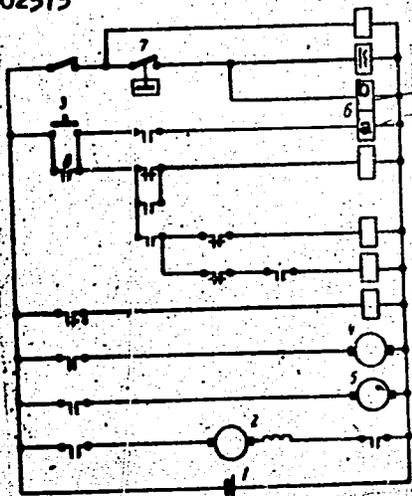


Fig. 1. 1 - storage battery;  
2 - electric motor; 3 - actuating  
unit; 4 - fuel pump motor;  
5 - oil pump motor; 6 - double-  
coil relay; 7 - oil pressure  
relay; a - locking coil;  
b - unlocking coil.

oil pressure relay. Orig. art. has: 1 diagram.

SUB CODE: 21/ SUBM DATE: 030ct64

Card 2/2 *ULR*

ZASLAVSKIY, Yefim Grigor'yevich, inzh.; PORTNOY, Vladimir Isaakovich,  
inzh.; KOSHEVOY, Vladimir Ivanovich, inzh.; DUBROVSKIY,  
Vladimir Zakharovich, inzh.; KESAREV, A.P., inzh.,  
retsenzent; STREL'NIKOV, S.V., inzh., retsenzent; MEL'NIKOV,  
V.Ye., red.

[Repair of TELO diesel locomotives in the roundhouse] Re-  
mont teplovozov TELO v depo. Moskva, Transport, 1965. 90 p.  
(MIRA 18:2)

1. Khar'kovskiy teplovozostroitel'nyy zavod imeni  
V.A.Malysheva (for Zaslavskiy, Portnoy, Koshevoy, Dubrovskiy).

KOGAN, L.B.; NOVIKOV, I.I.; ZOLOTOREVSKIY, V.S.; GORBUL'SKIY, G.F.; PORTNOY, V.K.

Shrinkage cracks during iron casting in metal molds. Lit.proizv. no.4:  
32-34 Ap '63. (MIRA 16:4)

(Die casting)

(Thermal stresses)

NOVIKOV, I.I.; ZOLOTOREVSKIY, V.S.; PORTNOY, V.K.

Position of the hot shortness maximum in eutectic-type binary systems. *Alim. splay* no.1:114-121 '63. (MIRA 16:11)

PORTNOY, V.M. (Dnepropetrovsk, prosp.Pushkina, d.25/27, kv.3)

Late results of the treatment of acute intestinal invagination in children. Nov. khir. arkh. no.12:48-54 D '61. (MIRA 14:12)

1. Kafedra khirurgii detskogo vozrasta (zav. - prof. A.D.Khristich)  
Dnepropetrovskogo meditsinskogo instituta na baze 3-y detskoy  
klinicheskoy bol'nitsy.

(INTESTINES--INTUSSUSCEPTION) (CHILDREN--DISEASES)

PORTNOY, V.M.

Diagnostic value of pneumocontrastography of the large intestine  
in ileocecal invaginations in children. Vest. rent. i rad. 40  
no.1:15-20 Ja-F '65. (MIRA 18:6)

1. Kafedra khirurgii detskogo vozrasta (zar.-prof. A.D.  
Khrisťish) Dnepropetrovskogo meditsinskogo instituta na  
baze detskoj bol'nitsy No.3 (glavnyy vrach L.V. Volkova).

PORTNOY, V.M. (Dnepropetrovsk, Filosofskaya ul., d.3, kv.1)

Treatment of intestinal invagination by air inflation. Vest.khir.  
89 no.11:93-100 N '62. (MIRA 16:2)

1. Iz kafedry khirurgii detskogo vozrasta (zav. - prof. A.D. Khristich) Dnepropetrovskogo meditsinskogo instituta (dir. - doktor med.nauk - N.Ya. Khoroshmanenko) na baze 3-ey detskoy klinicheskoy bol'nitsy (glavnyy vrach - L.V. Volkova).  
(INTESTINES---INTUSSUSCEPTION) (AEROTHERAPY)

KUZNETSOV, L.V., inzh., red.; PORTNOY, Z.S., red.

[High-torque hydraulic engines] Vysokomomentnye gidromotory. Moskva, Vses. nauchno-issl. in-t pod'emno-transportnogo mashinostroeniia, 1962. 109 p.  
(MIRA 17:7)

L 04176-57 EWT(m)/ENP(w)/I/ENP(t)/ETI IJP(c) JD/HW/JG/WB  
ACC NR: AT6027302 (N) SOURCE CODE: UR/2817/66/015/000/0047/0055

AUTHOR: Portnoy, V. K.; Zakharov, M. V.; Novikov, I. I.

ORG: none

TITLE: The nature of embrittling temperature zones in high temperature alloys of the copper-nickel-beryllium system

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut metallurgii i obogashcheniya. Trudy, vol. 15, 1966. Prevrashcheniya v splavakh tsvetnykh metallov v tverdom sostoyanii (Transformations in nonferrous metal alloys in a solid state), 47-56

TOPIC TAGS: high temperature metal, copper alloy, mechanical property, ductile material, brittle point, metallographic examination, grain structure, temperature dependence, oxidation resistance

ABSTRACT: High temperature brittleness was studied in the Cu-Ni-Be system. Two alloys containing 0.5 and 2 wt % NiBe were produced and their mechanical and physical properties were determined in the cast condition and after rolling in the annealed, quenched, and aged conditions. In order to determine whether intercrystalline oxidation was the cause of high temperature embrittlement, tests were conducted both in air and vacuum ( $3 \cdot 10^{-4}$  mm Hg). The relative elongation was given as a function of temperature up to 900°C. In the cast alloys, embrittlement occurred in the 400-600°C range whether or

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ACC NR: AT6027302

not testing was done in a vacuum; in fact the alloy with 0.5% NiBe had a higher ductility when tested in air. Microscopic analysis showed that the cast alloys had a single phase structure at room temperature, similar to quenched alloys, as a result of strong supersaturation upon cooling. When the test temperature was increased to 500°C, microstructural changes began to occur: the grain boundaries thickened and second phase particles began to appear within the grains. A wide two-phase region was observed at the grain boundaries in samples tested at 700°C, while at 860°C precipitation occurred in the body of the grains. The fracture appearance in the brittle zone was primarily intercrystalline. The electroconductivity, measured as a function of temperature, increased in a slope at about 500°C, indicating a rise in precipitation. Changes in microhardness between the center and boundary of the grain were greatest in the brittle zone. In the 2% NiBe alloy, after annealing at 960°C for 2 hrs and step cooling to prevent supersaturation, a minimum in ductility also occurred although it was much higher than for the cast condition. Metallography showed that in the annealed alloy the fractures were transcrystalline, with the cracks being initiated at the grain boundaries. X-ray analysis gave the lattice parameter for different cooling conditions and showed that a supersaturated solid solution could form even for air cooling at 20 deg/min. By slow furnace cooling at 1 deg/min the lattice parameter approached that of pure copper; however, the significance of supersaturation with regard to high temperature brittleness could not be rationalized. Tests done on the 2% NiBe alloy in both air and vacuum after cooling as slow as 0.03 deg/min still showed a ductility minimum at 500°C. Orig. art. has: 9 figures, 1 table.

SUB CODE: 11/      SUBM DATE: none/      ORIG REF: 010/      OTH REF: 001

Card 2/2-LC

PORTNOY, Ye.N.

Problems in the theory and practice of business accounting.  
Trudy Tbil. gos. ped. inst. 14:127-146 '59. (MIRA 15:3)  
(Accounting)

ROZOVSKIY, R.S., inzh., red.; PORTNOY, Z.S., nauchn. red.

[New and proposed hoisting and conveying machines and mechanisms] Novye i perspektivnye pod"emno-transportnye mashiny i mekhanizmy. Moskva, Nos.2-3. 1960. 237 p.  
(MIRA 16:11)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut pod"yemno-transportnogo mashinostroyeniya.  
(Hoisting machinery) (Conveying machinery)

6 (4)

SOV/107-59-3-33/52

AUTHOR: Portnyagin, A. (UA9CC)

TITLE: Telegraph Keying of Amateur Transmitters (Telegrafnaya manipulyatsiya lyubitel'skikh peredatchikov)

PERIODICAL: Radio, 1959, Nr 3, pp 38 - 39 (USSR)

ABSTRACT: For keying amateur telegraph transmitters any of the following methods will show good results if properly applied. Figures 1 thru 7 show the different possible keying circuits: 1) anode keying circuits for a) a tube with an indirectly heated cathode, b) a tube with a directly heated cathode, c) anode-screen keying; 2) screen keying; 3) pentode keying; 4) grid keying; 5) cathode keying; 6) cathode keying by a separate keying tube; and 7) screen keying of the master oscillator stage with application of an electronic relay. For the proper functioning of a transmitter, careful tuning of the keying circuit is required

Card 1/2

DANILYUK, V.A.; ZHUKOV, V.N.; PANOV, G.I.; KUTSENKO, G.L.; LUGOVETS,  
V.A.; NEKHONOV, N.A.; PORTNYAGIN, A.I.; RECHKIN, I.A.;  
SEREGIN, V.P.; SIVTSOV, V.P.; KHOLODNOV, Yu.I.; MEL'NIKOV,  
V.V., kand.tekhn.nauk, red.; KOZULIN, B., red.; CHERNIKHOV, Ya.,  
tekh. red.

[Radio amateur's handbook] Spravochnik radioliubitelia. Sverd-  
lovsk, Sverdlovskoe knizhnoe izd-vo, 1962. 838 p.

(MIRA 15:8)

(Radio--Handbooks, manuals, etc.)

BILICHEVA, G.I.; PORTNYAGIN, E.A.

Recent data on the Jurassic stratigraphy of the western part of  
the upper Amur Valley. Dokl. AN SSSR 152 no.3:684-686 S '63.  
(MIRA 16:12)

1. L'vovskiy gosudarstvennyy universitet im. I.Franko. Predstav-  
leno akademikom A.L.Yanshinyam.

MISNIK, Yu.F.; PORTNYAGIN, E.A.

Permian and Jurassic graben-synclines of the Mongolian-Okhotsk  
deep fault (eastern Transbaikalia and the upper Amur Valley).

Visnyk L'viv.un. Ser.geol. no.1:45-51 '62. (MIRA 16:7)

(Transbaikalia--Geology, Structural)

(Amur Valley--Geology, Structural)

LAVIENKO, Yo.I.; PONTNYAGIN, E.A.

Local metamorphism in one of the sections of the eastern wing  
of the Anikinskoye highland (upper Arar Valley). Vest. L'vov.  
un. Ser. geol. no.2:84-88 '64. (MIRA 19:1)

GORZHEVSKIY, D.I.; PORTNYAGIN, E.A.

Interrelationship of Paleozoic and Jurassic structures in Transbaikalia and the upper Amur Valley. Izv.vys.ucheb.zav.; geol. i razv. 6 no.11:13-22 N '63. (MIRA 18:2)

1. L'vovskiy gosudarstvennyy universitet im. Iv.Franko.

PORTNYAGIN, E.A.

Mesozoic and Cenozoic history of the development of the Mongolian-Okhotsk deep fault in the western part of the upper Amur Valley.

Izv.vys.ucheb.zav.; geol.i razv. 5 no.1:24-30 Ja '62.

(MIRA 15:2)

1. L'vovskiy gosudarstvennyy universitet imeni Iv.Franko.  
(Amur Valley--Faults (Geology))

PORTNYAGIN, E.A.; MOSKALENKO, Z.D.

Role of deep faults in the Mesozoic structure of the upper  
Amur Valley. Geol.sbor. [Lvov] no.9:94-107 '65.

(MIRA 18:12)

GOROKHOV, D.I.; GOVORUKHIN, A.P.; SMELAYA, T.V.; PSHENICHNAYA, A.M.;  
ZAYTSEVA, M.B.; Prinsipali uchastiye: KALASHNIKOV, B.V.;  
PLAKSINA, A.I.; PORTNYAGIN, I.I., otv.red.; ROGOVSKAYA, Ye.G.,  
red.; VOLKOV, N.V., tekhn.red.

[Agroclimatic reference book on Tambov Province] Agroklimate-  
cheskii spravochnik po Tambovskoi oblasti. Leningrad, Gidro-  
meteor.izd-vo, 1959. 123 p. (MIRA 13:2)

1. Kursk. Gidrometeorologicheskaya observatoriya. 2. Upravle-  
niye gidrometsluzhby Tsentral'no-Chernozemnykh oblastey (for  
Gorokhov, Govorukhin, Smelaya, Pshenichnaya, Zaytseva).  
(Tambov Province--Crops and climate)

GOVORUKHIN, A.P.; SMELAYA, T.V.; PSHENICHNAYA, A.M.; ZAYTSEVA, M.B.

Prinimali uchastiye: KALASHNIKOV, N.V.; FLAKSINA, A.I.;

DOLGOSHOV, V.M., starshiy nauchnyy sotrudnik. PORTYAGIN,  
I.I., otv.red.; MIROMENKO, Z.I., red.; VOLKOV, N.V., tekhn.red.

[Agroclimatic manual for Lipetsk Province] Agroklimaticheski  
spravochnik po Lipetskoj oblasti. Leningrad, Gidrometeor.izd-vo,  
1960. 94 p. (MIRA 14:1)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeoro-  
logicheskoy sluzhby. Upravleniye gidrometeorologicheskoy sluzhby  
TSentral'no-Chernozemnykh oblastey. 2. Upravleniye gidrometaluzhby  
TSentral'no-Chernozemnykh oblastey (for Govorukhin, Smelaya,  
Pshenichnaya, Zaytseva). 3. Institut geografii Akademii nauk SSSR  
(for Dolgoshov).

(Lipetsk Province--Crops and climate)

GOVORUKHIN, A.P.; PSHENICHNAYA, A.M.; SMELAYA, T.V.; ZAYTSEVA, M.B.;  
Prinimali uchastiye: KALASHNIKOV, N.V.; FLAKSINA, A.I.;  
DOLGOSHOV, V.I., starshiy nauchnyy sotrudnik. PORTNYAGIN, I.I.,  
otv.red.; ROGOVSKAYA, Ye.G., red.; BRAYNINA, M.I., tekhn.red.

[Agroclimatic reference book on Orel Province] Agroklimaticheskii  
spravochnik po Orlovskoi oblasti. Leningrad, Gidrometeor.izd-vo,  
1960. 91 p. (MIRA 13:11)

1. Kursk. Gidrometeorologicheskaya observatoriya. 2. Upravleniye  
g'idrometsluzhby tsentral'no-chernozemnykh oblastey (for Govorukhin,  
Pshenichnaya, Smelaya). 3. Institut geografii AN SSSR (for Dolgoshov).  
(Orel Province--Crops and climate)

PORTNYAGIN, Ivan Ivancovich; MERKUR'YEV, V.I., red.; BARANOV, I.A., tekhn.  
red.

[Scouts of the future; ordinary days of a group of communist labor]  
Razvedchiki budushchego; budni odnogo kollektiva kommunisticheskogo  
truda. Murmansk, Murmanskoe knizhnoe izd-vo, 1960. 33 p.  
(MIRA 14:11)

(Monchegorsk--Nickel industry)

PORTNYAGIN I.

THE ANOMALOUS CHANGE OF THE ELECTRIC RESISTIVITY OF THE Ni<sub>3</sub>Mn ALLOY IN THE MAGNETIC FIELD. A. Komar and I. Portnyagin (S. M. Kirov Ural Indust. Inst., Sverdlovsk). Doklady Akad. Nauk S.S.S.R. 60, 569-70 (1948).--

The relative changes of the elec. resistance  $r$  in a longitudinal and in a transverse magnetic field  $H$  were detd. for alloys Ni 75.6 Mn 24.3 at .%, quenched after annealing at temps. between 700 and 250°, which corresponds, resp., to completely disordered and to completely ordered condition. Depending on its degree of order, this alloy changes its spontaneous magnetization and its Curie temp. (K. and Volkenshtein, J. Exptl. Theoret. Phys. (U.S.S.R.) 11, 723 (1941)). In the unordered state, the shapes of the curves of  $\Delta r/r$  and  $\Delta r_{\perp}/r$  as functions of  $H$ , at 293 and at 77°, are analogous to those of pure Ni in the neighborhood of the Curie point (Englert, C.A. 26, 3153). In the ordered state, at 293°K., both  $\Delta r_{\parallel}/r$  and  $\Delta r_{\perp}/r$  are neg., have close values throughout, and increase (in abs. value) with increasing  $H$  along practically the same curve. At intermediate degrees of order,  $\Delta r_{\parallel}/r$  changes its sign at a definite  $H$ , depending on the degree of order.

N. Thon

Immediate source clipping

PORTNYAGIN, I.  
3A

537.312.67:669.018

1933. Electric resistance of the alloy CuPd in a transverse magnetic field and the further ordering of its atoms. KUMAR, A. AND PORTNYAGIN, I., Dokl. Akad. Nauk, SSSR, 60 (No. 3) 363-6 (1948) in Russian. — Cu, Pd belongs to the ordered alloys. In the ordering process of the atoms of the phase components the electric resistance  $\rho$  of the alloy and its Hall constant  $A$  decrease sharply. This is due to changes in the electron spectrum of the lattice and in the conditions of interaction with the lattice ions. It thus should be expected that the relative variation of the resistance in a transverse magnetic field would change non-trivially (i.e. not  $\propto 1/\rho^2$ ) as the ordering proceeds. The authors investigated  $\Delta \rho_{\perp}/\rho$  for the ordered and disordered states of the alloy at room temperature and at the boiling point of N in fields of intensities up to 28 kilo-oersted. An approximate equilibrium condition of order was attained after 600 hr of gradual annealing from 300° to 250°C. In the ordered state the relation between  $\Delta \rho_{\perp}/\rho$  and  $H$  was the normal

one;  $\Delta \rho_{\perp}/\rho = c(H/\rho)^2$ . It was found that  $c$  decreased with lowered degree of ordering. Experimental data indicate that the steps of proceeding order are roughly  $\propto$  tempering temperature. The measurements at high magnetic intensities in the disordered state proved to be more difficult. Still, it was possible to estimate that  $\Delta \rho_{\perp}/\rho$  in the ordered state is  $\sim 250 \times$  larger than in the state of disorder. n. v. k.

1) 537.312.67:669.018 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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USSR/Metals  
Nickel Alloys  
Resistance, Electrical

May 1948

"Anomalous Variation of Electrical Resistance in  
Ni-Mn Alloy in a Magnetic Field," A. Komar and I.  
Portnyagin, Ural Industrial Inst Izvesti S. M. Kirov,  
Ural Affiliate, Acad Sci USSR, 2 pp

"Dok Ak Nauk SSSR" Vol IX, No 4

Peculiarity of Ni-Mn is that spontaneous magnetivity  
and Curie temperature depend on heat treatment.  
Readings for resistance variation for both alloys were  
obtained for temperatures of 77° and 295° (centigrade  
absolute). Strength of magnetic field was varied  
from 0 to 20 KOe. Results, shown graphically, are  
difficult to reconcile with N. S. Arulov's theory.  
Submitted 24 Feb 1948.

PORTNYAGIN, I.

77387

...ary, I.  
"Electrical Resistance of the Alloy  $Cu_3Pd$  in the transverse magnetic field and remote arrangement of atoms," Reports of the AS USSR, Vol. 60, No. 3, 1948.

GERMAYZE, E.Z.; SHVARTS, V.S.; KAN, I.L.; PORTNYAGIN, I.I.; MYACHIN,  
I.K., retsenzent; KOLTUNOVA, M.P., red.; USENKO, L.A.,  
tekhn. red.

[Moscow-Leningrad-Murmansk; railroad guide] Moskva - Leningrad -  
Murmansk; zhelezodorozhnyi putevoditel'. Moskva, Transzheldoriz-  
dat, 1962. 190 p. (MIRA 16:3)

(Railroads--Guides)

GRABOWSKI, J.; PORINYAGIN, J.I.

On the Coulomb mechanism of the nuclear disintegration.

Acta physica Pol. 24 no.1:115-119 JI'63.

1. Joint Institute of Nuclear Research, Dubna 2. Institute  
of Nuclear Physics, Krakow (for Grabowski).

BURDIN, G., inzh.; PORTNYAGIN, S.

Some potentialities of the carrying capacity of the Black Sea merchant ships. Mor. flot 23 no.1:5-6 Ja '63.

(MIRA 16:4)

1. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut morskogo transporta (for Burdin).  
(Black Sea--Merchant ships--Cargo)

PORTNYAGIN, S., starshiy kapitan-nastavnik

Advantages and ways of organizing cargo transshipment in ports  
by means of railroad car interchange pools. Mor.flot 21  
no.2:4-7 F '61. (MIRA 14:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki  
i ekspluatatsii vodnogo transporta.  
(Cargo handling)  
(Harbors)

PORTNYAGIN, S. [Portniagin, M.S.], inzh.

Three-section barn with upper level compartment for storing  
corn. Sil'.bud. 7 no.6:12-13 Je '57. (MIRA 13:3)  
(Corn(Maize)--Storage)

PORTNYAGIN, S.

Insufficient use of the loading capacity of dry cargo freighters.  
Mor.flot 23 no. 12:10-11 D '63. (MIRA 17:5)

1. Glavnyy spetsialist otdela ekspluatatsii morskogo flota i portov Gosudarstvennogo proyektno-konstrukorskogo i nauchno-issledovatel'skogo instituta morskogo transporta Ministerstva morskogo flota Soyuza SSSR.

PORTNYAGIN, S.

Improve indices of the plan for cargo handling operations in  
harbors. Mor. flot 22 no.2:10-12 F '62. (MIRA 15:4)

1. Glavnyy spetsialist Gosudarstvennogo instituta po proyektirovaniyu  
morskikh portov i sudoremontnykh predpriyatly.  
(Cargo handling--Costs)

*PORTNYAGIN*  
POVALYAYEV, N., inzh.; PORTNYAGIN, S., inzh.

Basic principles of establishing wage schedules for merchant marine personnel. Mor. flot 18 no.2:2-4 F '58. (MIRA 11:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta.  
(Merchant seamen--Salaries, pensions, etc)

PORTNYAGIN, P.

Three years of the new kind of work. Obshchestv.pit. no.8:  
3-4 Ag '59. (MIRA 12:12)

1. Zaveduyushchiy stolovoy No.44, Leningrad.  
(Leningrad--Restaurants, lunchrooms, etc.)

PORTNYAGIN, S., inzh.

Casings for erecting hollow-brick walls of corn-drying barns.  
Sil'. bud. 7 no.7:5-6 J1 '57. (MIRA 12:11)  
(Walls)

PORTNYAGIN, V.D.; MIKHAYLOV, N.V.

Characteristics of bitumen heating in the AB3 cauldron and the  
intensification of the process. Avt.dor. 27 no.12:17-18 D '64.

(MIRA 18:2)

PORTNYAGIN, V.D.; MIKHAYLOV, N.V.

Effect of vibration on the rheological properties of bitumens.  
Dokl. AN SSSR 161 no.4:893-895 Ap '65. (MIRA 18:5)

1. Institut fizicheskoy khimii AN SSSR. Submitted September 23,  
1964.

L 28892-56 EWT(1)/FCC GW

ACC NR: AP6018050

SOURCE CODE: UR/0020/66/168/003/0543/0546

AUTHOR: Lebedinets, V. N.; Portnyagin, Yu. I.

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

TITLE: The mechanism of crushing small meteors in the atmosphere

SOURCE: AN SSSR. Doklady, v. 168, no. 3, 1966, 543-546

TOPIC TAGS: meteoric path, meteoric brightness, thermal flux, radiant, upper atmosphere

ABSTRACT: Photographs revealed a series of properties of weak meteors, including path shortening, a rapid increase in brightness near the appearance point, and an anomalous braking increase in the path. These properties have been explained by the porous structure of the meteors and a hypothesis of porosity is not necessary. During the collision of a meteor with air molecules the energy is uniformly distributed on the surface of a rotating spherical meteor. The density of the thermal flux depends upon the time, the coefficient of thermal transfer, the velocity of the meteor, and the zenithal distance of the radiant. Thermal conductivity formulas were developed and their solution made it possible to determine the quantity of matter evaporated from the meteor

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L 28892-66

ACC NR: AP6018050

surface. The density of the upper atmosphere may be determined by equating the energy spent for evaporation with that computed with these formulas. When the radius of the body is small, the meteor is rapidly heated throughout, and at a certain height it burns and is deformed in the melted state. Taking the Weber number for the stability of a liquid droplet into consideration, the critical Weber number  $We_0$  for a viscous liquid is found to be about 6.5. When the Weber number of the droplet is greater than the critical value, no droplet crushing occurs. The boundary value of the initial radius of a stable droplet is determined and this radius determines the possibility of crushing. The possibility of crushing is discussed for many cases. Big meteors crush at the height of intense evaporation and the droplets separated from the meteor can be further crushed when they are not stable. Orig. art. has: 1 figure and 17 formulas. [EG]

SUB CODE: 03, 04 / SUBM DATE: 10May65 / ORIG REF: 004 / OTH REF: 006  
ATD PRESS: 5606

Card 2/2 CV

L 09097-67 EWT(1) GW  
ACC NR: AP7002346

SOURCE CODE: UR/0203/66/006/004/0712/0716

AUTHOR: V. N. Lebedinets and Yu. I. Portnyagin

24

ORG: Institute of Applied Geophysics (Institut prikladnoy geofiziki)

TITLE: Initial radius of an ionized meteor trail

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 4, 1966, 712-716

TOPIC TAGS: meteor trail, meteor

ABSTRACT: The initial radius of an ionized meteor trail has been computed, taking into account the dependence of the effective diffusion cross sections of meteor atoms in the atmosphere on the velocity of the meteor. Since the initial expansion of the trail occurs for the most part due to the first several paths of the evaporating particles, the authors consider the contribution of the individual paths to the initial radius. The derived values of the initial radius  $R_{in}$  satisfy the condition  $0.93 R_{in}$ , where is the length of the free path of the evaporating particles for a given meteor velocity. The computed values of the initial radius made at Khar'kov, Kiev and Jodrell Bank. Orig. art. has: 3 figures and 21 formulas. (JPRS: 37,931)

SUB CODE: 03 / SUBM DATE: 26Jul65 / ORIG REF: 005 / OTH REF: 006

Card 1/1 net

UDC: 523.53

0925 0638

FAVORSKAYA, T.A.; PORTNYAGIN, Yu.M.

Synthesis of  $\beta$ -oxides of the acetylene series. Zhur.ob.khim. 34 no.2:  
699-700 F '64. (MIRA 17:3)

1. Leningradskiy gosudarstvennyy universitet.

FAVORSKAYA, T.A.; PORTNYAGIN, Yu.M.

Synthesis of enyne hydrocarbons starting from acetylenic  
 $\beta$ -glycols. Zhur. ob. khim. 33 no.8:2792 Ag '63. (MIRA 16:11)

1. Leningradskiy gosudarstvennyy universitet.

FAVORSKAYA, T.A.; PORTNYAGIN, Yu.M.

Conversions of acetylenic  $\beta$ -glycols. Part 3: Interaction of  
3,5-dimethyl-1-hexyne-3,5-diol and 3,4-dimethyl-1-hexyne-3,5-diol  
with concentrated sulfuric acid at low temperature. Zhur.ob.khim.  
32 no.7:2122-2127 JI '62. (MIRA 15:7)

1. Leningradskiy gosudarstvennyy universitet.  
(Glycols) (Sulfuric acid)

FAVORSKAYA, T.A.; PORTNYAGIN, Yu.M.

Transformations of B. glycols of the acetylene series. Part 5:  
Synthesis of glycol chloroacetates and study of their reactions  
with alkalies. Zhur. ob. khim. 35 no.3:435-439 Mr '65.  
(MIRA 18:4)

1. Leningradskiy gosudarstvennyy universitet.

FAVOROVAYA, T.A.; PORTNYAGIN, Yu.M.

Transformations of  $\beta$ . glycols of the acetylene series. Part 6:  
Effect of relative position of the functional groups of molecules  
of chloroethers of acetylenic  $\beta$ -glycols on their reaction with  
alkalies. Zhur. ob. khim. 35 no.3:440-442 Mr '65.

(MIRA 18:4)

1. Leningradskiy gosudarstvennyy universitet.

SHKREBTA, G.P. [Shkrebta, H.P.]; KRAYUSHKIN, V.A. [Kraiushkin, V.O.];  
PORTNYAGINA, L.A. [Portniakina, L.O.]

Spores and pollen in the oils of the Carpathian oil fields. Dop.  
AN URSSR no.6:746-748 '65. (MIRA 18:7)

1. Institut geologii i geokhimi goryuchikh iskopayemykh AN UkrSSR.

PORTNYAGINA, L.A.

Possibility of the division of the Upper Cretaceous and Paleogene  
flysh of the Soviet Carpathians according to the data of spore  
pollen analysis. Dokl. AN SSSR 159 no.4:814-816 D '64  
(MIRA 18:1)

1. L'vovskiy gosudarstvennyy universitet imeni I. Franko.  
Predstavleno akademikom D.V. Nalivkinym.

PORTNYAGINA, L.A.; SHCHERBA, V.M.

Spore-pollen complexes of the Upper Cretaceous and Paleogene  
flysch of the Beregovaya Skiba in the Carpathians. Vest. L'vov.  
un. Ser. geol. no.2:41-43 '64. (MIRA 19:1)

PORTNYAGINA, M.I.; MURASHKIN, K.P.

Improved supplying in rolled metal. Stal' 16 no.10:921-924 0 '56.  
(MIRA 10:9)

1. Ural'skiy filial Akademii nauk SSSR i Sverdlovskaya kontora  
Glavmetallozbyta Ministerstva chernoy metallurgii SSSR.  
(Rolling mills)

POR'NYA GINA, M.I.

Rationalizing the Supply of Metal Rolled Products. M. F. Por'nyagina and K. P. Miroshkin. (Stal', 1968, (10), 921-924). (In Russian). Examples of the extent to which unnecessary transport of rolled steel occurs in the Soviet Union are given and far greater decentralization is recommended. This, it is claimed, would enable users' requirements to be supplied more exactly, and a more equitable distribution of supplies between customers to be achieved with less transport. The present centralized organization Glavmetal, leabyt, with its forty branches throughout the Union, is considered unequal to its proper tasks. Typical transport costs per ton of various types of steel in the U.S.S.R. are given.--S. K.

PORTNYAGINA, V. H.

Alkylation of benzoic acid and 2-naphthol by alkyl-2-naphthyltriazines. V. Ya. Pochinok and V. A. Portnyagina (T. G. Shevchenko State Univ., Kiev). *Ukrain. Khim. Zhur.* 18, 631-4 (1952) (in Russian).—Reaction of  $\text{RMgX}$  with 2-naphthylazide gave: 2-C<sub>6</sub>H<sub>5</sub>NHN:NM<sub>e</sub> (I), m. 88.5-7.5°; Et analog (II), m. 67-8°; Pr analog (III), m. 80.5-1.5°; Bu analog (IV), m. 61-2°; iso-Am analog (V), m. 69-70°; allyl analog (VI), m. 83-4°. Soln. of 5 g. I and 3.3 g. BrOH in abs. Et<sub>2</sub>O leads to gas evolution and after standing overnight the mixt. yields 81% BrOMe. II gave 76% BrOEt. III gave 71% BrOPr. IV gave 77% BrOBu. V gave 70% BrOAm-iso. VI gave 68% BrO-CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>. Mixing 5 g. I and 3.9 g. 2-C<sub>6</sub>H<sub>5</sub>OH in C<sub>6</sub>H<sub>6</sub>, followed by standing overnight and heating on steam bath 1 hr. gave 63% 2-MeOC<sub>6</sub>H<sub>4</sub>, b. 373-6°, m. 71-2°; picrate, m. 93-4°. II similarly gave 65% 2-EtOC<sub>6</sub>H<sub>4</sub>, m. 37-8°; picrate, m. 91-5°. III gave 67% 2-PrOC<sub>6</sub>H<sub>4</sub>, m. 39-40°; picrate, m. 74-5°. V gave 66.8% 2-iso-AmOC<sub>6</sub>H<sub>4</sub>, m. 29°; picrate, m. 90-1°. G. M. Kosoloff

PORTNYAGINA, V. A.

"Condensation of Carbonyl Compounds With Ortho-Aminophenylmercaptanes."  
Cand Chem Sci, Kiev State U imeni T. G. Shevchenko, 3 Jan 55. (FU, 23 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

Portnyagina, V. A.  
USSR/Chemistry - Organic chemistry

Card 1/1 Pub. 116 - 12/29

Authors : Ushenko, I. K., and Portnyagina, V. A.

Title : The chemistry of cyanine dyes. Part 11. 3,4-Trimethylenethiacyanines

Periodical : Ukr. khim. zhur. 21/6, 744-749, Dec 1955

Abstract : The derivation of 8-mercaptotetrahydro-1,2,3,4-quinoline through splitting of 3,4-trimethylenebenzthiazolone-2 with alcoholic alkaline is announced. Several new thiacyanine and four styryl dyes were obtained through condensation of quaternary salts with ortho esters of carboxylic acid and p-dimethylaminobenzaldehyde in acetic anhydride or pyridine. It was found that quaternary salts with the trimethylene ring in 3,4 positions are more difficult in condensation with ortho esters than the homologous methylates or ethylates. Absorption maxima were established for all dyes synthesized. Five references: 2 USSR, 1 Eng., 1 USA and 1 Germ. (1931-1955).

Institution : Acad. of Sc., Ukr. SSR, Inst. of Organ. Chem.

Submitted : April 26, 1955

*Курчатов, В. А.*

*Condensation of  $\alpha$ -aminophenyl mercaptans with ketones.  
A. I. Kiprianov and V. A. Kurtyagin. J. Gen. Chem.  
U.S.S.R. 25, 2223-30 (1965) (Engl. translation). See C.A.  
50, 9378b. B. M. R.*

*Handwritten initials and numbers: "PM" and "24"*

PORTNYAGINA V. A.

6

*Chem*

Condensation of *o*-aminophenylmercaptans with ketones  
 A. I. Kirilany and V. A. Portnyagina (State Univ., Kiev).  
 Zhur. Obshchei Khim. 25, 2357-58 (1955). Heating 5 g.  
 $o$ -H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SH and 2.8 g. Me<sub>2</sub>CO in a sealed tube 1 hr. at 100°  
 gave 70% 2,2-dimethylbenzothiazoline, m. 45°, b<sub>3</sub>: 142-3°;  
 Ag deriv., m. 259-60°. Bz deriv., m. 150-7°. Treatment  
 with MeI 1 hr. at 100° gave 2,2,3-trimethylbenzothiazoline,  
 b<sub>3</sub> 140°. Similarly, Pr<sub>2</sub>CO gave 47% 2,2-dipropylbenzothi-  
 azoline, b<sub>3</sub> 180-8° (Ag deriv., decomp. 310°), and AcPh gave  
 65% 2-methyl-2-phenylbenzothiazoline, b<sub>3</sub> 232-5° (Ag deriv.,  
 decomp. 264°). Cyclopentanone gave 63% 2,2-tetramethyl-  
 enebenzothiazoline, m. 55°; Ag deriv., decomp. 212°;  
 Bz deriv., m. 154-5°. Cyclohexanone gave 66% 2,2-penta-  
 methylenbenzothiazoline, m. 111-12°; Ag deriv., decomp.  
 225°; Bz deriv., m. 114°. 1,4-Cyclohexanedione gave  
 1,1,4,4-bis(benzothiazolinylidene)cyclohexane, 63%, m. 233-  
 4°; di-Ag deriv., does not decomp. 300°; di-Bz deriv., m.  
 200-7°. Ac<sub>2</sub>Cl<sub>2</sub> gave 61% bis(2-methyl-2-benzothiazolinyl)-  
 methane, b<sub>3</sub> 125-7°. Heating *o*-MeNHC<sub>6</sub>H<sub>4</sub>SH with Me<sub>2</sub>CO  
 2 hrs. at 100° gave 81% 2,2,3-trimethylbenzothiazoline, b<sub>3</sub>

*Chem*  
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6

CONDENSATION OF 6 AMINO-

140°. Similarly the following ketones gave analogous products (% yield and phys. consts. given): Et<sub>2</sub>CO, 63%, b<sub>1</sub> 140-2°; MePrCO, —, b<sub>1</sub> 146-7°; Pr<sub>2</sub>CO, 50%, b<sub>1</sub> 140-2°; cyclopentanone, 83%, b<sub>1</sub> 178-80°; cyclohexanone, 73%, b<sub>1</sub> 168-8°, m. 35°; AcPh, 50%, m. 68°; *o*-tolylacetone, 30%, b<sub>1</sub> 85-7°; *p*-tolylacetone, 30%, b<sub>1</sub> 150-3°; 1,4-cyclohexanedione, 61%, m. 220°; Ac<sub>2</sub>CH<sub>2</sub>, 30%, b<sub>1</sub> 150-5°. Me<sub>2</sub>CO and 2,5-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>SH in 0.5 hr. on a steam bath gave 83% 2,2-dimethyl-6-nitrobenzothiazoline, m. 130-1°; *Ag deriv.*, decomp. over 300°; *Ac deriv.*, m. 127-8°. Cyclopentanone gave 60% 2,2-tetramethylene-6-nitrobenzothiazoline, m. 144-5°; *Ag deriv.*, decomp. 30°; *Ac deriv.*, m. 107-8°. *o*-H<sub>2</sub>NC<sub>6</sub>H<sub>3</sub>SH and EtCH<sub>2</sub>CO<sub>2</sub>Et in 3 hrs. at 100° gave 77% 2-methyl-2-carbethoxymethylbenzothiazoline, b<sub>1</sub> 190-2°; *Ag deriv.*, decomp. 227°; *Ba deriv.*, m. 155-6°. The use of the *N*-Me deriv. in this case gave 51% 2,3-dimethyl-2-carbethoxymethylbenzothiazoline, b<sub>1</sub> 180-2°. 2,5-H<sub>2</sub>N(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>SH and AcCH<sub>2</sub>CO<sub>2</sub>Et in 0.5 hr. at 100° gave 60% 2-methyl-2-carbethoxymethyl-6-nitrobenzothiazoline, m. 95°; *Ag deriv.*, decomp. 104-5°. The benzothiazolines are readily cleaved by acids and alkalis; heated above 200°, they give derivs. of benzothiazole. C. M. Kosolapoff

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PORTNYAGINA, V.A.; KARP, V.K.

Synthesis of some isothiuronic salts, derivatives of pyrimidine.  
Report No.1. Ukr. khim. zhur. 31 no.1:83-85 '65. (MIRA 18:5)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy  
institut.

PORTNYAGINA, V.A.; KARP, V.K.

Synthesis of some isothiazuronium derivatives of pyrimidine. Report No.2.  
Ukr. khim. zhur. 31 no.2:215-219 '65. (Minn 18:4)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy  
institut.

PETRUN'KIN, V. Ye.; PORTNYAGINA, V. A.

Sodium 2-( $\beta,\gamma$ -dimercaptoproxy)-ethanesulfonate, an analog  
of unithiol. Uk. khom. shur. 28 no.6:721-723 '62.  
(MIRA 15:10)

1. Ukrainskiy nauchno-issledovatel'shiy sanitarno-khimicheskiy  
institut.

(Propanesulfonic acid)

POCHINOK, V.Ya. [Pochynok, V.IA.]; PORTNYAGINA, V.A. [Portniagina, V.O.];  
SHRUBOVICH, V.A.

Decomposition of aliphatic aromatic triazenes by various acids,  
phenols and halohydrins. Visnyk Kyiv.un.no.2.Ser.fiz.ta khim.  
no.1:95-104 '59. (MIRA 14:8)

(Triazene)

PORTNYAGINA-PSHENICHNAYA, L.A.

Diatoms from upper Tortonian sediments from Podgortsy (south-western margin of the Russian Platform). Geol.sbor. [Lvov] no.7/8:430-440 '61. (MIRA 14:12)

1. Gosudarstvennyy universitet imeni Ivana Franko, L'vov. (Olesk region--Diatoms)

TROFIMOVSKAYA, A. Ya.; POFTSOVA, L.T.

Stage development in winter barley. Agrobiologia no.1:53-56  
Ja-F '60. (MIRA 13:5)

1. Vsesoyuznyy institut rasteniyevodstva, Leningrad.  
(Barley)

PASSET, B.V.; PORAY-KOSHITS, B.A.

Compliance of aqueous solutions of diazo-compounds with the  
law of dilution. Zhur.prikl.khim. 33 no.2:496-499 F '60.  
(MIRA 13:5)

(Diazo-compounds)

PORTNYAGINA, V.A.

Synthesis of mercapto derivatives of N-(n-propyl)-amides of acids  
and some isothiuronium salts. Ukr.khim.zhur. 25 no.1:102-106 '59.  
(MIRA 12:4)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy ins-  
titut.

(Thiuronium compounds)

(Amides)

PORTNYAGINA, V.A.

USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4446

Author : Ushenko, I.K. (X.); Ushenko, I.K., Portnyagina, V.A.  
(XI).

Title : Investigations of the Chemistry of Cyanine Dyes.  
X. 3,3'-Dicyclohexylthiacyanines. XI. 3,4-Trimethyl-  
lenethiacyanines.

Orig Pub : Ukr. khim. zh., 1955, 21, No 6, 738-743; 744-749

Abstract : X. To determine the nature of the effect upon the bathochromic action of phenyl substituents at the N-atoms of thiocarbocyanines (see Communication IX, RZhkhim, 1956, 54493), starting with N-cyclohexyl-o-aminothiophenol (I), and by way of the quaternary salts of benzothiazole (QS), there were synthesized a series of 3,3'-dicyclohexylthiacyanines (D), and also the styryls that are the products of condensation of QS with p-dimethylamino-benzaldehyde.

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USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4446

158; ICH of 2-methoxymethyl-benzothiazole (VII), 80, 177; dichlorocyclohexylate of 1,3-dibenzothiazolylpropane (VIII), 61, 162 (decomposes); dichlorocyclohexylate of 1,4-dibenzothiazolylbutane, 53, 169-170 (decomposes). p-Toluenesulfonates of the derivatives of benzothiazole are obtained by heating CCH in water with the Ag-salt of p-toluenesulfonic acid, after removal of AgCl the solution is evaporated, the residue is heated to 120-125° and the QS is thus obtained (listing the QS, yield in %, MP in °C): p-toluenesulfonate of 3-cyclohexyl-2-methylbenzothiazole (IX), 93, 199; p-toluenesulfonate of 3-cyclohexyl-2-ethyl-benzothiazole (X), 92, 181; di-(cyclohexyl-p-toluenesulfonate)-1,4-dibenzothiazolyl-butane (XI), 90, 147 (decomposes). D are obtained in the usual manner from the QS and the corresponding ortho-esters of carboxylic acids (boiling for 20-40 minutes) in pyridine or acetic anhydride (listing QS, D, yield in %, MP in °C

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USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4446

(decomposition; from alcohol),  $\lambda_{\max}$  (m $\mu$ ): II, 3,3-dicyclohexyl-thiacarbocyanine iodide, 50, 260, 566; X, 3,3'-dicyclohexyl-8,10-dimethyl-thiacarbocyanine perchlorate, 21, 187, 574; p-toluenesulfonate of 3-cyclohexyl-2-methoxymethyl-benzothiazole, 3,3'-dicyclohexyl-8,10-dimethoxythiacarbocyanine perchlorate, 42, 201, 610; IX, 3,3'-dicyclohexyl-9-methylthiacarbocyanine iodide, 67, 226, 555; IX, 3,3'-dicyclohexyl-9-ethylthiacarbocyanine perchlorate, 20, 228 (decomposes), 560; VIII, 3,3'-dicyclohexyl-8,10-methylene-thiacarbocyanine iodide, 28, 195, 569; XI, 3,3'-dicyclohexyl-8,10-dimethylene-thiacarbocyanine perchlorate, 50, 221 (decomposes), 617. Styryls are prepared in the usual manner in pyridine or acetic anhydride, the dye is precipitated from aqueous solution with KI or NaClO<sub>4</sub> and is recrystallized from alcohol (listing QS, styryl, yield in %, MP in °C (decomposition),  $\lambda_{\max}$  (m $\mu$ ): II, iodocyclohexylate of 2-(p-dimethylamino-styryl)-

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USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4446

of condensation of QS with p-dimethylamino-benzaldehyde. Maxima of absorption (AM) of TC were found to be close to the AM of 3,3'-diethylthiacyanines (RZhKhim, 1956, 54493), while the AM of styryls containing a trimethylene radical in 3,4 position are situated within a region of shorter wave lengths than the AM of the corresponding N-ethyl derivatives. 5 g 3,4-trimethylene-benzothiazolone-2 treated with solution of 8.7 g KOH in 75 ml alcohol (boiling 3 hours), the residue after distillation of the alcohol is dissolved in water and neutralized with HCl, and the I that separates is extracted with ether, yield 59%, BP 139-140°/5-6 mm; hydrochloride, MP 169-170°. QS is obtained by treating benzene solution of I with the corresponding acid chloride. By treating the aqueous solution with KI there is obtained the iodide of the 2-substituted 3,4-trimethylene-benzothiazolium (listing substituent, yield in %, MP °C

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USSR/Organic Chemistry - Synthetic Organic Chemistry

E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4446

-dimethyl, -, 248, 249 (precipitated with ether from alcohol), 575, -; 8,10-dieethyl, -, 214 (precipitated with ether from alcohol), 576, -; 8,10-methylene, 14, 290, 570, 13.0; 8,10-dimethylene, -, 288 (decomposes), 598, 14.6. Styryls were also prepared by the usual method, in pyridine or  $(\text{CH}_3\text{CO})_2\text{O}$ , perchlorates were separated

from aqueous solution with  $\text{NaClO}_4$  (listing styryl,

yield in %, MP in  $^{\circ}\text{C}$  (from alcohol),  $\lambda_{\text{max}}$   $\text{m}\mu$ ,

$E_{\text{max}} 10^{-4}$ ): 3,4-trimethylene-2-(p-dimethylamino-

styryl)-benzothiazolium iodide, 71, 292 (decomposes), 528, 6.0; 3,4-trimethylene-2-(p-dimethylamino-alpha-methylstyryl)-benzothiazolium perchlorate, 74, 187, 468, 2.0; 3,4-trimethylene-2-(p-dimethylamino-alpha-

Card 8/9

- 85 -

PORTNOY, V.F.

Metal nailing of a double fracture of the leg bones in ankylosis  
of the knee joint. Khirurgiia 36 no.11:143-144 N '60.

(MIRA 13:12)

1. Iz Kurmyshskoy uchastkovoy bol'nitsy Gor'kovskoy oblasti.

(LEG—FRACTURE)

(KNEE—DISEASES)

(INTERNAL FIZATION IN FRACTURES)

BDZHOLA, Dmitriy Kirillovich; YESIPENKO, Ivan Maksimovich; ZVONKOVA, Aleksandra Petrovna; PORTNYAGIN, Veniamin Pavlovich; SMIRNOV, N.,  
otv.red.; NADEZHINA, A., red.izd-va; TELEGINA, T., tekhn.red.

[Analysis of the administrative operations of industrial enterprises] Analiz khoziaistvennoi deiatel'nosti promyshlennykh predpriatii. Moskva, Gosfinizdat, 1960. 154 p. (MIRA 13:4)  
(Machinery industry--Finance) (Banks and banking)

5 (3)

AUTHORS:

Favorskaya, T. A., Portnyagin, Yu. M., SOV/79-29-8-14/81  
Hsu Ting-yu

TITLE:

Investigation of the Transformation of the  $\beta$ -Glycols of the Acetylene Series. II. Investigation of Transformations of 3,5-Dimethylhexane-1-diol-3,5 and 4,6-Dimethylheptane-2-diol-4,6

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2522 - 2531 (USSR)

ABSTRACT:

The authors were faced with the problem whether the dehydration of a  $\beta$ -glycol under formation of an unstable enin alcohol, previously carried out by T. A. Favorskaya and L. A. Pavlova (Ref 1), is of a general character. Therefore, the transformations of glycols (I), (II), and (III) were investigated with respect to the dehydration (Ref 1) mentioned above. In the reaction of compound (I) with diluted hydrochloric and sulphuric acid dehydration results under formation of enin alcohol 3,5-dimethylhexan-3-yl-1-ol-5. In the reaction of compound (I) and (II) with sodium and ethyl bromide in liquid ammonia the monoethyl ethers of the glycols, 3,5-dimethyl-3-ethoxyhexan-1-ol-5 and 4,6-dimethyl-4-ethoxyheptan-2-ol-6, result, the hydroxyl

Card 1/3

Investigation of the Transformation of the  $\beta$ -Glycols SOV/79-29-8-14/81  
of the Acetylene Series. II. Investigation of Transformations of 3,5-Dimethylhexine-1-diol-3,5 and 4,6-Dimethylheptene-2-diol-4,6

adjacent to the triple bond reacting. The first ether yields no precipitate with silver oxide dissolved in ammonia even on heating, in contrast to glycol itself (precipitate of acetylenide). In the reaction of (I) with sulphuric acid in the presence of mercury oxide two products of hydration and dehydration are formed. In the reaction of compound (I) with concentrated hydrochloric acid the dichloride of an allen structure forms, which is proved by its infrared spectrum. In the dehydration of saturated glycol (III) with diluted hydrochloric acid the alcohol 2,4-dimethylhexen-2-ol forms, in the partial cleavage of which methyl-ethyl ketene is separated. In the reaction of compound (II) with diluted sulphuric acid no enin alcohol results, as it decomposes completely into acetone and methyl isopropenyl acetylene. Besides, the simultaneous hydration and dehydration leads to a keto alcohol. There are 9 references, 6 of which are Soviet.

Card 2/3

Investigation of the Transformation of the  $\beta$ -Glycols SOV/79-29-8-14/81  
of the Acetylene Series. II. Investigation of Transformations of 3,5-Dimethylhexine-1-diol-3,5 and 4,6-Dimethylheptine-2-diol-4,6

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: July 16, 1958

Card 3/3

PORTNYKH, B.V.

"V.I. Lenin Combine" is an enterprise of communist labor. Kozh.-  
obuv.prom. 4 no.2:14-17 F '62. (MIRA 15:4)

1. Direktor kombinata imeni V.I. Lenina, Kirovskaya oblast'.  
(Kirov Province--Shoe industry)

PORTNYKH, V.M., inzhener. (g.Nevesibirsk)

Device for centering pairs of wheels. Zhel.dor.transp.37 no.11:75  
H '55.      (Locomotives) (Wheels)      (MLRA 9:2)

PORTNYI, L. Ya.

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;  
TKACHENKO, A.A., inzh.; SINITSKIY, V.D., inzh.; FREYDIN, L.M.,  
inzh.; PORTNYI, L.Ya., inzh.

Blast furnace performance at pressures up to 1.1 atm.  
(differential gage) [with summary in English]. Stal' 17 no.9:  
772-778 S '57. (MIRA 10:10)

1.Ukrainskiy institut metallov i zavod im. Voroshilova.  
(Blast furnaces)

*PORTNY, L.YA*

133-9-2/23

**AUTHOR:** Onopriyenko, V.P., Starshinov, B.N., Candidates of Technical Sciences and Trachenko, A.A., Sinititskiy, V.D., Freydin, L.M., Portnyy, L.Ya., Engineers.

**TITLE:** Operation of a Blast Furnace with 1.1 atm. Top Pressure.  
(Rabota domennoy pechi s davleniem do 1.1 ati)

**PERIODICAL:** Stal', 1957, No. 9, pp. 772 - 778 (USSR).

**ABSTRACT:** The influence of top pressure variation from 0.6 to 1.1 atm. on the operation of a large (1 386 m<sup>3</sup>) blast furnace was investigated. The profile of the furnace is shown in Fig.1. Characteristics of burden materials and coke during the individual test periods are given in Tables 1 and 2. Operating factors are given in Table 3. Changes in the distribution of CO<sub>2</sub> along the throat radius in Fig.2, the composition and temperatures of the peripheral and top gas in Fig.3, the pressure drop with the height of the furnace in Fig.4, changes in the gas pressure along the furnace throat radius in Fig.5. Changes in the length of tap hole and furnace-operating indices during various testing periods are given in Tables 4 and 5, respectively. On the basis of experience gained, the following conclusions are drawn: an increase of top pressure from 0.6 to 1.1 atm., contributes to the development of the peripheral flow of gases. In such case, a decrease on the coke charge or an increase in the proportion

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Operation of a Blast Furnace with 1.1 atm. Top Pressure.

of direct (ore first) charges (with simultaneous dropping of the whole charge) leads to an increase in amount of ore charged to the periphery with a subsequent decrease in the peripheral flow. Static pressure along the furnace height changes linearly. On increasing pressure of gas in the throat from 0.11 atm. to 0.46 atm. and blast volume from 1 400 to 3 400 m<sup>3</sup>/min, the blast pressure increased more than that of top gas, while the uniform drop of pressure along the height of the furnace was preserved. On increasing mean gas pressure in the furnace by an appropriate increase in driving rate, the blast pressure increases to the same extent as the pressure of gas in the throat. With a constant blast volume, the pressure of gas in the stack increases to a lesser degree than that in the throat. On transfer to a higher top pressure (1.1 atm.) the blast temperature can be increased by 20 - 50 °C and the driving rate increased by 2-6% (in comparison with operating conditions of a top pressure 0.6 - 0.8 atm). The operation of the furnace becomes smooth, but on decreasing top pressure back to 0.6 - 0.8 atm., the smoothness of the operation deteriorates. On increasing top pressure from 0.8 to 1.1 atm., the output of the furnace increased by 8.3% and the coke rate decreased by 2.9%. On decreasing pressure from 1.1 atm. to 0.6 - 0.8 atm., the output of the furnace decreased by 5.0 - 9.3%

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Operation of a Blast Furnace with 1.1 atm. Top Pressure.

and coke rate increased by 3.8 - 3.7% (recalculated on equal iron content in the burden). There are 5 tables and 5 figures.

ASSOCIATION: The Ukrainian Institute of Metals (Ukrainskiy Institut Metallov) Works im. Voroshilov (Zavod im. Voroshilova)

AVAILABLE: Library of Congress.

Card 3/3

PORTO, D. N.

PORTO, D.N.

New concepts of the principles governing magnetic recording processes. Static fields of the recording unit. Trudy Kom. po akust. no.5:48-66 '50. (MLRA 7:7)  
(Magnetic recorders and recording)

Cand. Technical Sci.

PORTO, D. N.

"Some Problems of the Theory of Magnetic Sound Recording." Sub 8 Mar 51, Moscow  
Electrical Engineering Inst of Communication

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

PORTOCALA, R.

Electrophoretic studies of the serum of people with epidemic hepatitis R, Portocala and O, Moscovici. *Commun. acad. rep. popul. Romine* 6: 727-32 (1958). Electrophoretic exams. of serums from 25 patients with epidemic hepatitis showed an increase in  $\alpha_2$  and  $\beta$  globulins but a decrease in albumin. The albumin/globulin ratio was decreased. No relation between the form of the disease and the content of different protein fractions in the serum of the patients could be established. Emanuel Merdinger

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PORTOCALA, R.

PORTOCALA, R. and others. The technique of obtaining fine sections for electron microscopy. p. 845. Vol. 6, no. 6, June 1956. COMUNICARILE. Bucuresti, Rumania.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

EXCERPTA MEDICA Sec 4 Vol 12/1 Med. Micro. Jan 59

241. ELECTROPHORETIC STUDY OF THE MUSCLE PROTEINS IN NEWBORN MICE. MODIFICATIONS OF THE PROTEINOGRAM IN EXPERIMENTAL INFECTION WITH COXSACKIE VIRUS - Studiul electroforetic al proteinelor musculare la soarecele nou-născut. Modificările proteinogramei în infecția experimentală cu virusul Coxsackie - Portocala R. and Moscovici O. Inst. de Inframicrobiol., Acad. R. P. R., București - COM.ACAD. R. P. R. 1957, 7/12 (1085-1088) illus. 2

Three protein fractions were recognized, which differed in their migration rates, and which were provisionally named fractions 'a', 'b' and 'c'. In Coxsackie virus infection, fraction 'b' showed an increase, and fraction 'c' a simultaneous decrease.

Waterman - Amsterdam (L,4)

PORTOCAIA, R.; BOERU, V.; RADVAN, A.

Chromatography of amino acids in the blood of epidemic hepatitis patients. Stud. cercet. inframicrobiol., Bucur. 8 no.1:29-38 1957.

(AMINO ACIDS, in blood

in epidemic hepatitis, chromatography)

(HEPATITIS INFECTIOUS, blood in  
amino acids, chromatography)

PORTOGAIA, R.; VELICICOV, V.; COPELOVICI, Y.

Cytochemical studies of experimental herpes (desoxyribonucleic acid).  
Stud. cercet. inframicrobiol., Bucur. 8 no.2:149-154 1957.

1. Comunicare prezentata la Institutul de inframicrobiologie al Academiei  
R.P.R. in sedinta din 17 octombrie 1956.

(HERPES, experimental

desoxyribonucleic acid synthesis & utilization by virus  
during multiplication in rabbits)

(DESOXYRIBONUCLEIC ACID, metab.

utilization by herpes virus during multiplication in exper.  
infect. in rabbits)

PORTOGALA, R.; BOERU, V.; CAPRANU, R.

Studies of experimental herpetic hyperglycemia (induced hyperglycemia and hypoglycemia). Stud. cercet. inframicrobiol., Bucur. 8 no.3:341-348 1957.

(ENCEPHALITIS, experimental  
herpetic, causing hyperglycemia, comparison with glucose-induced hyperglycemia & eff. of insulin)

(HERPES, virus  
intracerebral inoculation causing encephalitis & hyperglycemia in rabbits, comparison with glucose-induced hyperglycemia & eff. of insulin)

(HYPERINSULINISM, experimental  
eff. on exper. herpetic encephalitis)

(HYPERGLYCEMIA, experimental  
induced by cerebral inoculation of herpes virus in rabbits, comparison with glucose-induced hyperglycemia)

EXCERPTA MEDICA Sec 4 Vol 12/3 Med. Micro. Mar 59

1036. ELECTROPHORETIC PATTERN OF MUSCLE PROTEINS IN THE NEWBORN MOUSE. CHANGES IN COXSACKIE VIRUS INFECTIONS - *Proteinogramme électrophorétique du muscle des souris nouveaux-nés.*

Modifications survenues au cours de l'infection à virus Coxsackie - *Portocala R. and Moscovici O. Inst. d'Inframicrobiol., Bucarest - RIV. IST. SIEROTER. ITAL. 1958, 33/2 (107-109) Graphs 2*

Extracts of muscle from newborn mice showed 3 protein fractions with different migration velocities. In Coxsackie virus infection the proportions of these fractions were changed. The histological changes observed in muscles of Coxsackie-infected mice are thus reflected in changes of the protein pattern.

Russi - Ancona (L, 4)

PORTOCAIA, R.; DUMITRESCU, S.; ROTHSCHILD, L.; IONESCU, N.I.

Morphological characteristics of type A2 ("A-Asia") influenza virus isolated in Rumania. Acta virol. Engl. Ed., Praha 3 no.2:113-114 Apr 59.

1. Institute of Inframicrobiology, Academy of the Rumanian People's Republic, Bucharest.

(INFLUENZA VIRUSES,

type A2 isolated in Rumania, morphol. characteristics)

PORTOCALA, R.; BOERU, V.; SAMUZL, I:

Biosynthesis of Influenza Virus starting from an Ether-phenol  
Virus Extract. Acta virol. Engl. Ed., Praha 3 no.3:172-174 July  
1959

1. Institute of Inframicrobiology, Academy of the Rumanian People's  
Republic, Bucharest.

(INFLUENZA VIRUSES, chem)  
(RIBONUCLEIC ACID, chem)

PORTOKALE, R.; BOYERU, V.

Micromethod for electrophoresis in agar-agar gel. Vop.med.khim. 5  
no.4:310-316 JI-Ag '59. (MIRA 12:12)

1. Institut virusologii Akademii nauk Rumynskoy Narodnoy Respubliki.  
(BLOOD PROTEINS)  
(ELECTROPHORESIS)

PORTOGALA, R.; BOERU, V.; SAMUEL, I.

The role of ribonucleic acid in the infectivity of the influenza virus. Stud. cercet. inframicrobiol., Bucur. 11 no.1:41-49 '60.

1. Comunicare prezentata la Institutul de inframicrobiologie al Academiei R.P.R. in Sesiunea stiintifica festiva din 17-18 august 1959.

(INFLUENZA VIRUSES)  
(RIBONUCLEIC ACID)

PORTOKALA, R.; BOYERU, V.; SAMUEL', I.

Effect of ribonucleic acid on the infective activity of influenza  
viruses. Vop. virus. 5 no. 2:178-182 My-S '60. (MIRA 14:4)

1. Institut infarmikrobiologii Akademii nauk Rumynskoy Narodnoy  
Respubliki, Bukharest.

(INFLUENZA) (NUCLEIC ACIDS)

PORTOCALA, R.; SAMUEL, I.; POPA, L.; PRAHOVEANU, E.; BILLER, S.; HORER, O.

Comparative biological and physico-chemical studies of some nucleic acids exposed to the action of heat. Stud. cercet. in-framicrobiol. 15 no.5:423-440 '64.